

REMARKS

This paper is submitted in response to the office action mailed July 31, 2002. A Request for a Three Month Extension of Time under 37 CFR 1.136(a) is submitted herewith, along with the fee prescribed by 37 CFR 1.17(a)(3). The response is therefore timely. In view of the amendments and remarks submitted herein, reconsideration is respectfully requested.

In the office action, it was noted that the listing of references in the specification was not a proper submission under 37 CFR 1.98(b). These references were cited in the Information Disclosure Statement under 37 CFR 1.98 that has been filed in this case, receipt of which has been acknowledged. A copy of the Form PTO-1449 listing these references (and others) was attached to the office action.

In the office action, the drawings were objected to on the following grounds: (1) The reference numeral "22" was used to designate both the cooling ribs and the focusing lens. (2) The drawings fail to show several elements recited in the claims, i.e., the motor, the element that may be remotely sensed, and the remote sensing means. To overcome these objections, applicant submits proposed drawing changes to Figures 1, 2, 3, and 4 (which show the cooling fins designated by the numeral 82. The specification has been amended accordingly. Also, a proposed change to Figure 6 is submitted herewith, showing the motors 100, the elements that may be sensed (magnetic markers) 102, and the sensing means 103 that are recited in the claims and that are described in the specification at page 21, lines 8-17. The specification has also been amended to recite the reference numerals. No new matter has been added.

As a final formal matter, Claim 2 has been amended to change "comprise" to "comprises."

Claims 1, 2, 3, and 8 were rejected as anticipated by US 2,439,330 – Zander. Claims 4 and 5 were rejected as unpatentable (35 U.S.C. 103(a)) over Zander in view of US 3,049,615 – Sawyer. Claim 6 was rejected as unpatentable

over Zander in view of US 2,465,578 – Czarnikow et al. Claim 7 was rejected as unpatentable over Zander in view of Czarnikow et al. and in further view of Sawyer. Claims 9 and 10 were rejected as unpatentable over Zander in view of US 2,195,166 – Diggins. These rejections are respectfully traversed.

Claim 1, as amended, now recites, *inter alia*, “light beam influencing means comprising at least one beam-shaping blade that is adjustable to shape the periphery of a light beam emitted by the light source so as to form the light beam into a selected one of a plurality of geometric shapes.” While it is believed that this limitation was implicit in Claim 1 as filed, the amended Claim 1 now explicitly (and thus more clearly) defines each beam-shaping blade as itself being adjustable to determine the geometric shape of the beam. As explained in the specification, each beam-shaping blade is used to shape or cut off the periphery of the light beam, thereby determining the geometry of the light beam so as to obtain a selected geometric shape from among a multitude of different shapes. See, e.g., p. 2, lines 12-16; p. 12, lines 23-24; p. 14, line 4; and p. 15 line 14. Figure 7 of the drawings illustrates how the beam-shaping blades shape or cut off the periphery of the light beam so as to form a light beam with the desired geometry. Thus, as illustrated in Figure 7, a light beam is shaped by the blades so as to have an eight-sided polygonal periphery. A copy of Figure 7 is attached hereto, marked up to show the eight-sided beam produced in the exemplary embodiment.

The beam-shaping blade(s) of the present invention is/are used in combination with a light influencing element, which may be, for example, an iris, which is used to vary the amount of light passing through the device by changing the size (but not the shape) of the beam. Thus, the beam influencing element (such as an iris) that is used in combination with the beam-shaping blade(s) cannot be used to change or select the geometric shape of the beam without the use of the beam-shaping blade(s).

In the Zander device, by contrast, the light influencing means includes a form of iris (see Column 1, line 25) that, as is conventional, is used solely to vary the amount of light passing through the device by opening and closing a circular opening, but which does not shape the light beam into a selected one of a multitude of shapes. Thus, Figure 4 of Zander shows the iris in its closed position, while Figure 5 shows the iris in its open position. In both instances, it can be seen that the light beam always has a circular shape, and the iris cannot be used to change that shape, only its size. Thus, the iris of Zander cannot be used to shape or cut off the periphery of the light beam in order to determine the geometry of the beam so as to select one of a multitude of different shapes, e.g., square, triangular, trapezoidal, or polygonal. In short, Zander neither teaches or suggests "a beam shaping bladed" as defined in Claim 1, nor does the reference teach or suggest the use of a beam-shaping blade in the combination recited in Claim 1.

Furthermore, none of the secondary references cited in the office action, taken singly or combined with Zander and/or with each other, teaches or suggests the use of beam-shaping blades or other means to shape or cut off the periphery of the light beam in order to determine the geometry of the light beam so as to obtain a selected one of a multitude of geometric shapes for the beam.

Accordingly, it is respectfully submitted that Claim 1 defines patentably over the art of record, taken singly or in any combination that may reasonably suggest itself to those of ordinary skill in the art, and is therefore allowable. Claims 2-10 depend from Claim 1, and should therefore likewise be allowable.

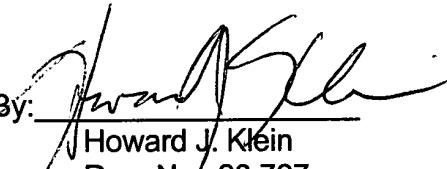
Pursuant to the provisions of 37 C.F.R. §§ 1.17 and 1.136(a), the Applicants hereby petition for an extension of three(3) months to January 31, 2003, in which to file a reply to the Office Action. The required fee of \$465.00 is enclosed herewith.

If the Examiner has any questions concerning this application, he is requested to contact the undersigned at (949) 955-1920.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 11-1159 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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Attached: Version with Markings to Show Changes Made

VERSION WITH MARKINGS TO SHOW CHANGES MADE

The application has been amended as follows:

IN THE SPECIFICATION:

Page 8: The paragraph beginning at line 13 has been amended as follows:

The infra red portion of the light beam 20a is transmitted through the dichroic reflector 21 to cooling ribs [22] 82 in a manner well known in the art so as to reduce the heat distortion of light beam influencing elements, as described below, that are arranged along the path of the light beam from the light source 20 to the exit aperture 24.

Page 21: The paragraph beginning at line 8 has been amended as follows:

For remote control of the adjustment rings it will also be readily apparent to those skilled in the art that an electrical motor 100 with a pinion 101 for each ring may be arranged such that the teeth of the pinion 101 mesh with the teeth on the rim of the respective ring. The motors 100 for instance may be firmly attached to the frame 6 or be spring biased so that any irregularities in the mountings of the rings and thereby the [teethed] toothed rims may be taken up. Magnetic markers 102 may be attached to the rings such that a sensing means 103 may sense the marker 102 and thereby precisely identify the position of the respective ring as a basis for the subsequent rotation thereof to a new setting of the respective beam influencing means.

IN THE CLAIMS:

The claims have been amended as follows:

1. (Amended) A lighting fixture for projecting a beam of light and for use for spot lighting in connection with theater stages, cinema and television studios and the like, the fixture comprising:

a light source arranged at one end of a housing having a light beam exit aperture at the opposite end thereof, the light source and aperture being arranged generally concentric with a longitudinal or optical axis of the housing;

light beam influencing means comprising [a] at least one beam-shaping blade that is adjustable to shape the periphery of a light beam emitted by the light source so as to form the light beam into a selected one of a plurality of geometric shapes, and a light influencing element selected from the group consisting of a lens, an iris, and a pattern or gobo, for influencing [a] the light beam emitted by the light source and being arranged along the path of the light beam along said longitudinal axis through the housing from the light source to the aperture; and

adjustment means operatively associated with each beam-shaping blade for adjusting the position of [the light beam influencing means] its associated beam-shaping blade relative to said longitudinal axis, [the] each adjustment means being arranged for rotation around said longitudinal axis and being connected to [the light beam influencing means] its associated beam-shaping blade such that rotation of the adjustment means around said longitudinal axis adjusts the position of the [light beam influencing means] associated beam-shaping blade relative to said longitudinal axis.

2. (Amended) A lighting fixture according to claim 1, wherein the adjustment means [comprise] comprises an annular body arranged with the axis thereof substantially coinciding with the longitudinal axis.